



# Secure E-Government Portals

- Building a web of trust and convenience for global citizens

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# Speaker Introduction

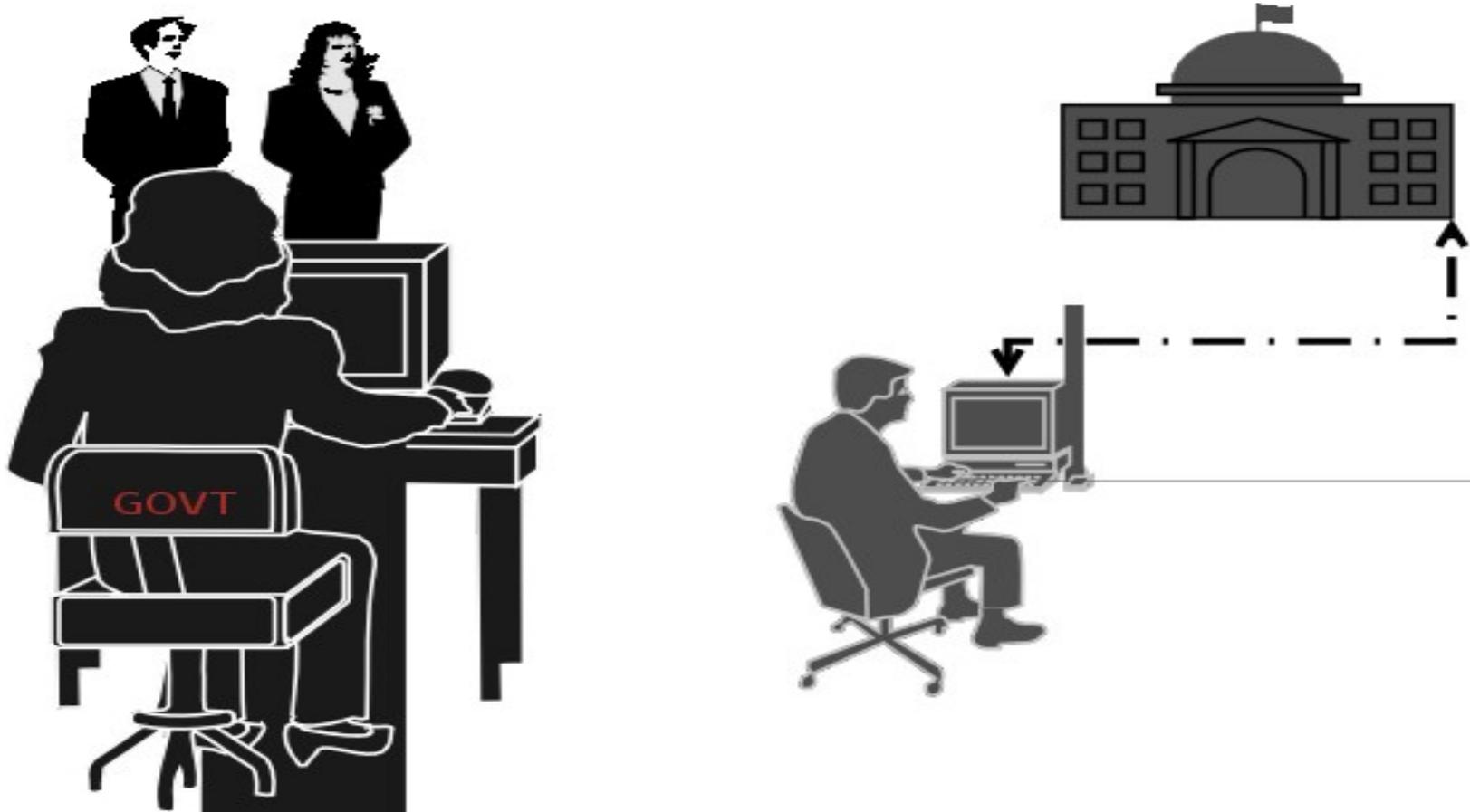
- Lead Security and Identity Management for JBoss Enterprise Middleware Suite (JEMS) projects.
- Represent JBoss Red Hat at:
  - Java Community Process (JCP)
  - OASIS (SAML, XACML, WS-Federation, Symmetric Key Mgmt.)
  - W3C (Security Context)

# Agenda

- Statement
- Introduction
- Details
- Challenges
- Suggestions
- Q & A
- Reference

# S statement

- Just as a citizen divulges personal sensitive information, to avail services, when he visits or talks to a Government representative, he should also be able to enter the same information into a browser displaying an E-Government website.



# Introduction

- On-line usage is increasing.
- US Social Security Administration (SSA) projected 53 million online visitors and 29 million of them will view FAQ for FY06 [1]
- US IRS Web Site had 13.5 million unique visitors in March 2007 [3]
- Senior citizens are the fastest growing on-line audience, who will double by 2010. [1]
- Portals act as One-Stop resource for information.
- Benefits of a Secure E-Government Portal
  - Cost-effective means to provide timely information and services to citizens.
  - Reduce the need for dedicated governmental representatives to provide similar information or services.

# Details

- Parties involved in a E-Government Portal are the citizens (end-users), browsers (technical clients), Government Servers as source/sink of information, software products, communication media etc.

# Details

- End-users (humans) can be insecure or error-prone.
  - Delegate responsibility to technology as far as possible.
  - Establish trust between browser and the Govt. server agent.
  - Use of SSL and/or other low-risk security technologies like Secure Remote Password (SRP) should be used.
  - XML Encryption and XML Signature can provide message level security. WS-Security encompasses this for SOAP messages.

# Details

- Use of federated identity allows users to use a single authentication service and access multiple heterogeneous services.
  - OpenID, Security Assertion Markup Language (SAML), WS - Federation are all emerging and likely candidates.
    - There is no clear winner right now.
  - The Citizen does not need to remember every URI for a government service. He can navigate to various agency websites all linked from one web portal that he normally uses.
    - Illinois State Portal can be used to go to the Department of Motor Vehicles (Drivers License etc), County Tax Department etc.

# Details

- OpenID Adoption
  - 60+ million users
  - 1200+ enabled web sites
  - 7% growth each week (new sites)

# Details

- The *Web Security Context Working Group* (part of the Security Activity) is chartered to specify a baseline set of security context information that should be accessible to Web users, and practices for the secure and usable presentation of this information, to enable users to come to a better understanding of the context that they are operating in when making trust decisions on the Web.

# Challenges

- Getting buy-in into a single IT installation from various departments and organizations of a Government is difficult.

*“Another challenge is the capacity of departments to successfully interact with each other in pursuit of whole of government goals and more broadly, for the entire Service to work in partnership with other bureaucracies, with business and with community groups as resources and responsibility are devolved closer to where problems or opportunities exist.”*

*- Hon. Jon Howard, Prime Minister, Centenary of the APS Oration, 2001 [2]*

# Suggestions to increase adoption

- Increase On-line usage.
  - Provide incentives to citizens to use the web.
    - Reduced Vehicle S tickers (1-2% discount)
    - 2005 free IRS tax filing meant 120 million tax filings expected, with 88 million turned in, 1 week before the deadline [4].
- In-built security context in the portals.
  - For different levels of services, require different types of security.
    - Tax Return filing will require prior return's details and a PIN etc.
    - Citizen alerts requires just username/password.
- Marketing Secure E-Government Portals.
  - Free Seminars provided to citizens displaying usage and security.

# Q & A

# References

- [1] *'Effective eServices at SSA'*, Office of Electronic Services, Social Security Administration, ([http://www.usa.gov/webcontent/documents/effective\\_eServices-09-19-2006.ppt](http://www.usa.gov/webcontent/documents/effective_eServices-09-19-2006.ppt))
- [2] Australian Government use of information and communication technology (<http://www.apsc.gov.au/mac/technology.htm>)
- [3] Nielsen/NetRatings (<http://www.netratings.com/press.jsp?section=newsletter>)
- [4] *'Tax-Related Web Sites captured 7.6 Million Internet Users This Past Week'*, (<http://www.internetadsales.com/modules/news/article.php?storyid=5283>)